Claims

[c1]   What is claimed is:

1. A font display method utilizing a system CPU and a font display co-processor to accelerate font display, the method comprising:

transmitting font information from the system CPU to the co-processor;

loading a mapping table and a font bitmap table into the font display co-processor;

the font display co-processor corresponding the font information to a font index according to the mapping table;

the font display co-processor corresponding the font index to a font bitmap according to the font bitmap table; and

the font display co-processor transmitting the font bitmap to a display module.

[c2]   2. The font display method of claim 1 further comprising loading a font code table to the font display co-processor.

[c3]   3. The font display method of claim 2 further comprising the font display co-processor corresponding the font in-

formation to a font code according to the font code table.

[c4] 4. The font display method of claim 2 further comprising the font display co-processor corresponding the font code to the font index according to the mapping table.

[c5] 5. The font display method of claim 1 further comprising loading the font bitmap to a memory of the display module.

[c6] 6. The font display method of claim 1 wherein the font display co-processor comprises an effect making unit.

[c7] 7. The font display method of claim 6 wherein the effect making unit adds predetermined special effects to the font bitmap.

[c8] 8. The font display method of claim 7 wherein the added predetermined special effects are selected from a group consisting of colorful fonts, animation fonts, and 3D fonts.

[c9] 9. A font display co-processor for use in a device comprising a baseband CPU, the font display co-processor comprising:
a memory used to store font information, a mapping table, and a font bitmap table;

a processing unit electrically connected to the memory used to load the font information, the mapping table, and the font bitmap table to the memory;

a receiving unit electrically connected to the system CPU to receive the font information from the system CPU; and

a transforming unit electrically connected to the memory and the receiving unit for transforming the font information into a font code, or transforming a font code into a font index, or transforming a font index to a font bitmap.

[c10]   10. The font display co-processor of claim 9, wherein the processing unit is connected to a display memory and the processing unit is used to store the font bitmap in the display memory.

[c11]   11. The font display co-processor of claim 9 further comprising an effect making unit used to add predetermined special effects to the font bitmap.

[c12]   12. The font display co-processor of claim 11 wherein the predetermined special effects are selected from a group consisting of colorful fonts, animation fonts, and 3D fonts.

[c13]   13. A computer system comprising:

a system CPU for controlling system operations;

a font display co-processor comprising:

a memory used to store a mapping table and a font bitmap table;

a processing unit electrically connected to the memory used to load font information, the mapping table, and the font bitmap table to the memory;

a receiving unit connected to the system CPU for receiving the font information from the system CPU; and

a transforming unit electrically connected to the memory and the receiving unit for transforming the font information into a font code, or transforming a font code into a font index, or transforming a font index to a font bitmap; and

a display module connected to the font display co-processor for displaying the font bitmap.

[c14]   14. The computer system of claim 13 wherein the font display co-processor further comprises an effect making unit electrically connected to the transforming unit for adding predetermined special effects to the font bitmap.

[c15]   15. The computer system of claim 14 wherein the predetermined special effects are selected from a group consisting of colorful fonts, animation fonts, and 3D fonts.

[c16]   16. The computer system of claim 13 wherein the font information indicates which font is to be displayed on

the display module.

[c17]   17. The computer system of claim 13 wherein the font display co-processor will be able to locate the associated font bitmap from the bitmap table by directly counting the relative location of the font code in the mapping table.

[c18]   18. The computer system of claim 13 wherein the system CPU is a baseband processor.

[c19]   19. The computer system of claim 13 wherein the computer system is a mobile phone or a PDA.